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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/871,270

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Edward O. Clapper

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EXAMINER

LIANG, REGINA

ART UNIT

PAPER NUMBER

2674

12

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/871,270

Applicant(s)

CLAPPER, EDWARD O.

Examiner

Regina Liang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28, 31 and 33-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-16 and 26-28 is/are allowed.
- 6) ☒ Claim(s) 1-6, 17-20, 31, 33-35 and 37 is/are rejected.
- 7) ☒ Claim(s) 7-11, 21-25, 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the controller is coupled to provide at least one of sound or air in response to the activation of the activatable element as claimed in claim 8 in addition to the controller to indicate a position of the first end and the opposite end as claimed in claim 1, and the optical sensor indicates the position of the housing as claimed in claim 10 in addition to a controller to indicate a position of the first end and the opposite end as claimed in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the optical sensor indicates the position of the housing as claimed in claim

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10 in addition to a controller to indicate a position of the first end and the opposite end as claimed in claim 1. The controller is coupled to provide at least one of sound or air in response to the activation of the activatable element as claimed in claim 8 in addition to the controller to indicate a position of the first end and the opposite end as claimed in claim 1.

Claim Rejections - 35 USC § 102

4. Claims 1-4, 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Verrier et al (US. PAT. NO. 5,475,401 hereinafter Verrier).

As to claim 1, Figs. 1A, 2A of Verrier discloses a user-input device (20), comprising a housing having a first end (e.g., writing end 4) and an opposite end (eraser end 4'), a controller (e.g., 30-34, 40-44, 30'-34', 40'-44') to indicate a position of the first end and the opposite end (using the pressure detectors to detect the writing end is in contacted with the tablet or the eraser end is in contacted with the tablet) and to cause one or more pixels of a display device to activate based on the indicated position of at least the first end of the housing (writing data or drawing lines in the display screen reads on activating one or more pixels of a display device, for example see col. 3, line 5-62).

As to claim 2, Verrier teaches the input pen comprising a first sensor (38) at the first end, a second sensor (38') at the second end.

As to claim 3, Verrier teaches the first and the second sensors are transducers (pressure sensors).

As to claim 4, Fig. 1A of Verrier discloses the controller is coupled to transmit (46) the position of the first end of the housing to a processor-based system (74).

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As to claim 17, Verrier discloses a input device comprising determining a position of a first end and a second end of the user-input device (using the pressure detectors to detect the writing end is in contacted with the tablet or the eraser end is in contacted with the tablet), illuminate one or more pixels of a display device based on the position of the user input device (writing data or drawing lines in the display screen reads on illuminating one or more pixels of a display device).

Claim Rejections - 35 USC § 103

5. Claims 1, 5, 6, 17, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (US. PUB. NO. 2002/0163510 hereinafter Williams).

As to claims 1 and 17, Figs. 2 and 3 of Williams discloses a user-input device (300), comprising a housing having a first end (324) and an opposite end, a controller (328) to indicate a position of the first end and to cause one or more pixels of a display device to activate based the first end of the housing (using the writing pen to generate digital ink information on the display screen reads on activating one or more pixels of a display device). Williams does not explicitly disclose the controller indicate a position of the opposite end. However, it would have been obvious to one of ordinary skill in the art to realize the controller of Williams also indicates the position of the opposite end by virtue of the fact that when the controller indicates the first end is in contact with the writing surface the position of the opposite end is also indicated, e.g. when the first end is down contacting the writing surface the opposite end is away from the writing surface.

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As to claims 5, 18, Williams teaches the controller (328) is coupled to indicate the orientation (e.g. orientation sensor 322) of the housing to a processor-based system (202).

As to claim 6, Williams teaches the controller is coupled to cause the one or more pixels to be activated based on the orientation (orientation sensor 322) of the housing.

6. Claims 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of O'Connor et al (US. PAT. NO. 6,188,392).

As to claim 19, Williams does not explicitly disclose the accelerometer determining the speed of the user-input device as it is moved. However, O'Connor teaches to use an accelerometer sensor for determining the speed of the user-input device as it is moved (e.g. col. 4, lines 25-40). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the accelerometer of Williams to determine the speed of the user-input device as it is moved as taught by O'Connor so as to provide an input device that provides an accurate detection of the two dimensional motion of the tip of the pen on the writing surface thereby providing accurate information about the text or graphics input to a computer (col. 2, lines 42-45 of O'Connor).

As to claim 20, Williams as modified by O'Connor teaches illuminate the one or more pixels based on at least one of the orientation and speed of the user-input device as claimed.

7. Claims 31, 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al (US. PAT. NO. 5,646,650 hereinafter Miller) in view of Searby et al (US. PAT. No. 5,357,265 hereinafter Searby).

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As to claim 31, Figs. 1-3 of Miller discloses a digital airbrush peripheral, comprising a housing (50), a display (20) coupled to the housing to indicate a currently active digital paint color (see Fig. 2), an activatable element (370 in Fig. 3, and see col. 7, lines 1-3) coupled to the housing to activate the digital airbrush peripheral, and an interface (381) coupled to the activatable element, to communicate information regarding the activatable element to a data processor device (col. 4, line 64 to col. 5, line 2). Miller does not disclose a control unit to cause air to be generated in response to an activation of the activatable element. However, Searby discloses an electronic graphic system comprising a control unit (e.g., 23, 24 in Fig. 3) to cause air to be generated in response to an activation of the activatable element (24). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the digital airbrush peripheral of Miller to have a control unit as taught by Searby so as to provide a stylus which can realistically simulate the feel of an airbrush and to provide a system able to simulate painting using an implement with a pressure sensitive flow rate (col. 2, lines 35-40 of Searby).

As to claim 33, Searby teaches the airbrush peripheral comprising an air generator (air source) to generate air in response to a selection of the activatable element.

As to claim 34, Miller teaches sensors (360) to sense information regarding the position of the digital airbrush peripheral.

As to claim 35, Miller teaches a processor to cause a light to be emitted from the digital airbrush peripheral, wherein the light indicates the color of the digital paint (350-352).

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8. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and Searby as applied to claim 31 above, and further in view of Wagner et al (US. PAT. NO. 5,767,843 hereinafter Wagner).

Miller as modified by Searby does not disclose the activatable element is coupled to control an intensity of a digital spray on the display. However, col. 3, line 50 to col. 4 line 13 of Wagner teaches an airbrush device comprising an activatable element which is coupled to control an intensity of a digital spray on the display. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the activatable element of Miller as modified by Searby to be coupled to control an intensity of a digital spray on the display as taught by Wagner for controlling the operation of the airbrush simulation in response to manipulation of a control level on the pen type sensor.

Allowable Subject Matter

9. Claims 12-16, 26-28 are allowed.

10. Claims 7-11, 21-25, 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments filed 6/1/04 have been fully considered but they are not persuasive.

Applicant's remarks regarding the specification and the drawing objections on page 7 are not persuasive. It is true that Fig. 5 of the applicant's drawing shows a controller coupled to provide at least one of sound or air in response to the activation of the activatable element, separately Fig. 5 also shows an optical sensor 530 coupled to control unit 505, separately Fig. 2 shows a control unit 105 to which is coupled a first sensor and a second sensor. However, there is no combination figure to show a control unit to which is coupled a first sensor and a second sensor to indicate a position of the first end and the opposite end, **and** the control unit coupled to provide at least one of sound or air in response to the activation of the activatable element, **and** the control unit coupled to an optical sensor as is claimed. Applicant's specification does not disclose a single embodiment combining Fig. 2 and Fig. 5 in which a control unit 105 is coupled a first sensor and a second sensor to indicate a position of the first end and the opposite end, **and** the control unit coupled to provide at least one of sound or air in response to the activation of the activatable element, **and** the control unit coupled to an optical sensor as claimed.

Applicant's remarks regarding Verrier on pages 7-8 are not persuasive. Even though Verrier does not use the term controller, however Verrier teaches using the circuits 30-34, 40-44, 30'-34', 40'-44' to indicate and control the position of the writing end and the eraser end such as using the pressure detectors to detect the writing end is in contacted with the tablet or the eraser end is in contacted with the tablet, therefore the circuits 30-34, 40-44, 30'-34', 40'-44' read on the controller as claimed.

Applicant's remarks regarding Williams on page 8 are not persuasive. As stated in the rejection above, although Williams does not explicitly disclose the controller indicate a position of the opposite end, however, it would have been obvious to one of ordinary skill in the art to

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realize the controller of Williams also indicates the position of the opposite end by virtue of the fact that when the controller indicates the first end is in contact with the writing surface the position of the opposite end is also indicated, e.g. when the first end is down contacting the writing surface the opposite end is away from the writing surface.

Applicant's allegation in that "Searby does not teach or suggest a control unit within a digital airbrush peripheral to cause air to be generated in response to activation of an activatable element" on page 8 are not persuasive. Searby teaches a control unit (e.g., 23, 24 in Fig. 3) to cause air to be generated (from air source) in response to an activation of the activatable element (24) as claimed.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

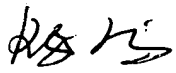
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (703) 305-4719. The examiner can normally be reached on Monday-Friday from 9AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (703) 305-4709. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


REGINA LIANG
PRIMARY EXAMINER
ART UNIT 2674

RL
7/2/04